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Argentinas de Botánica, ciudad de Salta, 16–20 September 1985. We acknowledge the economic help given by CONICET and the technical assistance of Víctor H. Calvetti.—ELÍAS R. DE LA SOTA, División Plantas Vasculares, Facultad Ciencias Naturales y Museo, UNLP, Paseo del Bosque, 1900 La Plata, Argentina; MARTA MÓNICA PONCE, Instituto de Botánica Darwinion, Labardén 200, C.C. no. 22, 1642 San Isidro, Argentina; LILIANA A. CASSÁ DE PAZOS, Instituto Fitotécnico Santa Catalina, Facultad de Agronomía, UNLP, C.C. no. 4, 1836 Lavallol, Argentina.

Botrychium pinnatum in Colorado.—Western North America has been found to be a center of distribution for the moonworts, *Botrychium* subg. *Botrychium*, with 13 species and several hybrids (Wagner & Wagner, Amer. Fern J. 73:53–62, 1983; Wagner & Wagner, Amer. Fern J. 76:33–47, 1986). The mountains of Colorado have proven to be rich in both species and localities. It is possible to find four or even five species growing together in a roadside meadow in the subalpine zone, as was demonstrated in the 1984 Annual Fern Foray on Mt. Evans, led by the Wagners and ourselves. Although the state has been the scene of intense botanical activity, most attention has been focused on the state's spectacular alpine flora. Botrychiums have been collected only incidentally until recently, when they became the subject of study.

On 30 July 1986, while traveling north on US Rt 550 just south of Coal Bank Pass, near the southern boundary of San Juan County, one of us (J.D.M.) noted that we were passing what could be good Botrychium habitat. We stopped and examined a small dry drainage channel at the edge of an Engelmann spruce forest. Elevation was approximately 3045 m (10,000 ft). In a short time approximately twelve plants were found of a Botrychium. These were identified as B. pinnatum St. John, using the keys in Lellinger (A field manual of the ferns & fern allies of the United States & Canada, 1985) and Wagner and Wagner (1986). Specimens have been identified also by W. H. Wagner Jr. (pers. comm.). Silhouettes of this collection, Montgomery & Root 86-279, are illustrated in Figure 1. The similarity in vegetative blade and pinna shape and margin with the illustrations in Wagner and Wagner (1983, fig. 1, e-g) is striking and also confirms our identification. These plants were growing in a relatively dense growth of low herbs in contrast to the more open habitat such as roadsides where Colorado moonworts are usually found. In drier gravel near the roadside one plant of B. lanceolatum and two of a possible B. lanceolatum × pinnatum hybrid were found. The possible hybrids have been sent to W. H. Wagner Jr. for further study. Specimens of B. pinnatum have been deposited at COLO and MICH. The collection has also been reported to the Colorado Natural Areas Program and is being considered for listing under plants of special concern for the state. Weber (Rocky Mountain flora, 1976) listed B. boreale Milde, a Eurasian species formerly confused with B. pinnatum (Wagner & Wagner, 1983) as occurring in Colorado. This record is apparently based on a specimen (Willard & Porsild 6062, COLO) from Rocky Mountain National Park in Larimer County. Recent examination of this specimen has shown that it is probably B. hesperium (Maxon &

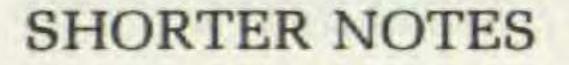






FIG. 1. Silhouettes of leaves of Botrychium pinnatum from Coal Bank Pass, Colorado (Montgomery & Root 86-279).

Clausen) Wagner & Lellinger. The specimens collected from San Juan County are thus the first verified record of *B. pinnatum* in Colorado. This represents a range extension to the south from the range reported by Lellinger (1985) as Alaska to the mountains of Montana, northern Nevada, and Oregon. Ranges of most moonworts are subject to revision as these small and inconspicuous plants become better understood and pteridologists become more familiar with their habitats. We observed additional potential habitats for moonworts on both Coal Bank Pass and Molas Divide. The San Juan Mountains are a geologically complex area of southwestern Colorado which is largely inaccessible and has not been thoroughly explored botanically; future examination of this area by pteridologists is certainly warranted.—PETER G. ROOT, Kathryn Kalmbach Herbarium, Denver Botanic Gardens, 909 York St., Denver, CO 80206, and JAMES D. MONTGOMERY, Ecology III, Inc., R.D. 1, Berwick, PA 18603.

New Records of Pteridophytes from the State of Chiapas, Mexico.—As a result of intensive field work for the Flora Mesoamericana Project, several species of pteridophytes must be added to those already known for the State of Chiapas. Some of them were expected (Smith, Flora of Chiapas, part 2: Pteridophytes,